#### **REVISED STAP SCREENING TEMPLATE**

GEF ID	11073
Project title	Accelerating low-emission community energy in Argentina
Date of screen	13 June 2023
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#### 1. Summary of STAP's views of the project

This project aims to decarbonize the high-emitting energy sector in Argentina. Specifically, the project seeks to remove multi-scale barriers to scaling low-emission community energy systems. The key barriers to be addressed include:

- Incoherence in policy and government actions on low-emission community energy;
- Lack of empirical evidence on the viability and feasibility of low-emission community energy;
- Insufficient knowledge and capacity on the necessary business models and financial instruments for scaling sustainable community energy systems;

The proposal is well-prepared with a good system analysis of the problem, identification of the main drivers of the problem, a technically sound problem tree and theory of change, key stakeholder identification, and the incorporation of the gender dimensions. Proposed interventions also incorporate policy and regulatory, technical, business model, and financing mechanisms solutions, which could be innovative and lead to transformational changes. The project will likely deliver on its energy decarbonization objectives if well implemented.

Areas that require strengthening include the technical criteria for selecting the most effective renewable energy system in different communities, better clarity in the estimate of GEBs, strengthening of the pursuit of integrated outcomes – co-benefits, and the need to incorporate future trends in the drivers of change to inform robust interventions that will lead to durable GEBs and transformative impacts.

Please see the next sections for more details.

## STAP's assessment\*

Concur - STAP acknowledges that the concept has scientific and technical merit.

 Minor - STAP has identified some scientific and technical points to be addressed in project design Major - STAP has identified significant concerns to be addressed in project design

Please contact the STAP Secretariat if you would like to discuss.

## 2. Project rationale, and project description – are they sound?

The proposal clearly describes what has been done and what needs to be done to accelerate progress toward decarbonizing the energy sector in Argentina, including the baseline and business-as-usual trajectory. The context, the different current energy systems, and their various components are well articulated. It is unambiguous that progress will be slow without the project, so the proposed project will accelerate progress toward decarbonizing the energy sector.

The proposal also appropriately analyzes the system, including two significant drivers of change (population growth and adverse climate change leading to increase energy demand) as well as the gender dimension of the problem. The project objectives are also well formulated, and proposed activities are appropriately targeted at suitable scales (upstream and downstream).

Given the significant role of the population and climate change in driving energy demand, the proposal needs more reflections on how the future could unfold, given that these two drivers are outside the project's interventions. It is essential to create a narrative of plausible futures (say for the next 25-40 years) – what could be the energy demand with increasing population and global warming, and how can the project ensure that the selected interventions are robust to meet this future demand? This will ensure that the interventions are robust enough for these possible futures.

The relevant stakeholders are identified and listed in the stakeholder engagement plan. The roles of key stakeholders are also well articulated in the proposal. The project has a catalytical objective and plans to build on already generated momentum.

A detailed problem tree and theory of change (ToC) grounded in solid science and with key barriers, enablers, and assumptions to achieving environmental and socio-economic benefits is included. The ToC detailed the different project components, drivers, assumptions, risks, and the required institutional and behavioral changes needed to achieve the necessary outcomes.

The proposal prioritizes wind and solar renewable systems. Criteria and processes for selecting the most effective system in the different pilot communities need to be developed. It is also not very clear whether the solar systems will only be installed on rooftops of built-up environments, not on land. There is a need to establish whether the rooftop spaces are sufficient to install the panels required to meet the envisaged energy targets. If solar and wind installations are done on land, the environmental impacts (i.e., land degradation, habitat loss, etc.) must be considered.

The project has significant potential to be innovative as it includes technological, policy, business model, and financial mechanisms interventions that could be novel and help promote behavior change among stakeholders. These innovations are necessary for transformational change that accelerates progress toward a decarbonized energy system.

To achieve transformation, it is essential that the interventions are well-designed and targeted, using state-ofthe-art holistic solutions and ensuring that barriers to scaling are identified and addressed. For example, in developing policies and laws, it is essential to analyze policy gaps and identify contradictory or antagonistic policies (e.g., subsidies to fossil fuel) that could hinder project success or lead to leakages. Hence, working to ensure better policy coherence will be a vital objective of this project. Furthermore, for even broader transformational change, communities in less built-up areas, including rural areas, should be considered in future initiatives.

The proposal presents an estimate of direct and indirect GEBs expected from the project, but more details and clarity on the calculations need to be provided. How much emissions reduction is expected per installed community energy pilot system? What assumptions are underlying the estimates – for example, how regulatory interventions, financial facilities, capacity-building initiatives, and innovations would lead to potential scale-up that will deliver the indirect emissions reduction?

Also, although the proposed interventions include energy-saving measures (demand management and energy efficiency measures) and renewable energy installation, the PIF did not have GEBs for core indicators 6.3 and 6.4 related to these measures—the reason for this need to be clarified.

Further on the benefits of the project, there is a need to reflect on other potential environmental impacts depending on which renewable energy system is selected and how they are installed (for example, the effect of using land that could be used for other purposes for more renewable energy installations, or impact of installations on biodiversity). There is also a need to reflect on the decommissioning period to ensure sustainable disposal plans for renewable energy hardware and electronic waste. Also, potential socioeconomic impacts, including possible employment/unemployment impacts, should be considered.

Further to the points above, it is essential that interventions are designed to achieve integrated outcomes (i.e., multiple GEBs and co-benefits were possible). The proposal appropriately identified potential socio-economic co-benefits from the project, including energy access, resilience energy grid, and local renewable energy value chain that could lead to job creation and economic growth and facilitate a just transition. The last co-benefits (job creation) are pre-requisite co-benefits needed to achieve the GEBs (see <u>STAP categorization of co-benefits</u> types). Hence, the interventions should be designed to achieve this benefit required to accomplish the GEBs mandated for the GEF (i.e., GHG emissions reduction). It is also essential that the co-benefits from the project are tracked and measured to adequately report the overall impact and return on GEF's investment.

The project includes a knowledge management component in the theory of change as a pathway to achieving the project objectives. It will be critical to ensure that its execution is based on identified, not assumed, knowledge gaps. Furthermore, capacity building of key actors should be strategic to ensure Argentina benefits from enhanced capacities in key institutions.

Most project design and implementation risks have been appropriately identified, and suitable mitigation measures have been proposed. More reflections on the environmental risks should be considered if additional land is required for more renewable energy installations.

Given the critical role of climate change in increasing energy demand, the project needs to consider the impact of climate change beyond what was presented in the "risks to project preparation and implementation" section. Some dimensions of climate change impact are outside the control of the project (projected increase in temperature, flood, etc.). Hence, they need to be addressed within the project rationale as part of the drivers of change rather than in the risk management section (see recent <u>GEF training of new PIF template</u>). This underlines the need to develop a narrative of plausible futures that considers the potential effects of a changing climate on achieving the project's goal and creating robust intervention options for these possible futures.

## 3. Specific points to be addressed, and suggestions

To further strengthen this project, STAP recommends the following:

- Develop a narrative of plausible futures based on the identified priority drivers of change outside the project interventions to inform the design of interventions that will be robust to the plausible futures and ensure that project outcomes and GEBs are durable. For details on doing this, please see STAP's <u>brief</u> and <u>primer</u> on simple future narratives.
- 2. We encourage the proponent to consider undertaking a policy gap analysis to understand where conflicting policies can hinder the achievement of the expected outcomes and ensure these are addressed appropriately. See <u>STAP's paper on policy coherence</u> for more guidance.
- 3. More details on how the renewable energy system (solar or wind) will be selected need to be included. Currently, they are presented as if they are interchangeable. It needs to be clarified whether the build-up areas have sufficient space for all the envisaged renewable energy installations. If more energy is required and there are land use conflicts with agriculture. In that case, agrivoltaics may need to be considered (see <u>Agrivoltaics provide mutual benefits across the food–energy–water nexus in drylands</u>, for more).
- 4. Consider the need for the decommissioning stage and how hardware and electronic waste will be managed in designing and selecting interventions.
- 5. Provide more information on how the estimated GEBs were calculated and the underlying assumptions. Also, clarify whether the project will include GEBs related to energy saved and increased in installed renewable energy capacity per technology and include this in the GEB estimates.
- 6. We encourage the proponent to ensure that interventions are designed to help achieve integrated outcomes (that is, multiple GEBs and co-benefits, especially the pre-requisite co-benefits). The proponent should also put in place the provision to track, measure and report the co-benefits to be

achieved through the project. Please see <u>STAP's recent paper on incorporating co-benefits in GEF's</u> investments for guidance.

7. There is also a need to reflect on potential employment/unemployment impacts. The project may benefit from an initial exercise of capacity mapping to identify the fundamental capacity gaps and inform the designing of capacity-strengthening activities.

\*categories under review, subject to future revision

## ANNEX: STAP'S SCREENING GUIDELINES

- How well does the proposal explain the problem and issues to be addressed in the context of the system within which the problem sits and its drivers (e.g., population growth, economic development, climate change, sociocultural and political factors, and technological changes), including how the various components of the system interact?
- 2. Does the project indicate how **uncertain futures** could unfold (e.g. using simple **narratives**), based on an understanding of the trends and interactions between the key elements of the system and its drivers?
- 3. Does the project describe the **baseline** problem and how it may evolve in the future in the absence of the project; and then identify the outcomes that the project seeks to achieve, how these outcomes will change the baseline, and what the key **barriers** and **enablers** are to achieving those outcomes?
- 4. Are the project's **objectives** well formulated and justified in relation to this system context? Is there a convincing explanation as to **why this particular project** has been selected in preference to other options, in the light of how the future may unfold?
- 5. How well does the **theory of change** provide an "explicit account of how and why the proposed interventions would achieve their intended outcomes and goal, based on outlining a set of key causal pathways arising from the activities and outputs of the interventions and the assumptions underlying these causal connections".
  - Does the project logic show how the project would ensure that expected outcomes are **enduring** and resilient to possible future changes identified in question 2 above, and to the effects of any conflicting policies (see question 9 below).
  - Is the theory of change grounded on a solid scientific foundation, and is it aligned with current scientific knowledge?
  - Does it explicitly consider how any necessary **institutional and behavioral** changes are to be achieved?
  - Does the theory of change diagram convincingly show the overall project logic, including causal pathways and outcomes?
- 6. Are the project **components** (interventions and activities) identified in the theory of change each described in sufficient detail to discern the main thrust and basis (including scientific) of the proposed solutions, how they address the problem, their justification as a robust solution, and the critical assumptions and risks to achieving them?
- 7. How likely is the project to generate global environmental benefits which would not have accrued without the GEF project (**additionality**)?
- 8. Does the project convincingly identify the relevant **stakeholders**, and their anticipated roles and responsibilities? is there an adequate explanation of how stakeholders will contribute to

the development and implementation of the project, and how they will benefit from the project to ensure enduring global environmental benefits, e.g. through co-benefits?

- 9. Does the description adequately explain:
  - how the project will build on prior investments and complement current investments, both GEF and non-GEF,
  - how the project incorporates **lessons learned** from previous projects in the country and region, and more widely from projects addressing similar issues elsewhere; and
  - how country policies that are contradictory to the intended outcomes of the project (identified in section C) will be addressed (**policy coherence**)?
- 10. How adequate is the project's approach to generating, managing and exchanging **knowledge**, and how will lessons learned be captured for adaptive management and for the benefit of future projects?

# **11.** Innovation and transformation:

- If the project is intended to be **innovative**: to what degree is it innovative, how will this ambition be achieved, how will barriers and enablers be addressed, and how might scaling be achieved?
- If the project is intended to be transformative: how well do the project's objectives contribute to transformative change, and are they sufficient to contribute to enduring, transformational change at a sufficient scale to deliver a step improvement in one or more GEBs? Is the proposed logic to achieve the goal credible, addressing necessary changes in institutions, social or cultural norms? Are barriers and enablers to scaling be addressed? And how will enduring scaling be achieved?
- 12. Have **risks** to the project design and implementation been identified appropriately in the risk table in section B, and have suitable mitigation measures been incorporated? (NB: risks to the durability of project outcomes from future changes in drivers should have been reflected in the theory of change and in project design, not in this table.)